## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Jiebo Luo, et al.

METHOD FOR SEMANTIC SCENE CLASSIFICATION USING CAMERA METADATA AND CONTENT-BASED CUES

Serial No. 10/712,657

Filed: 13 November 2003

Group Art Unit: 2624 Confirmation No. 2589

Examiner: Bernard Krasnic

## **DECLARATION UNDER 37 C.F.R. 1.132**

I, Jiebo Luo, do hereby declare that:

- 1. I am an inventor of the above-identified patent application.
- 2. I have been practicing in the field of image processing for 18 years.
- 3. I earned a Ph.D. in Electrical Engineering from The University of Rochester in 1995.
- 4. I have read the article, "Using Bayesian Neural Networks to Classify Segmented Images", IEEE July 1997, pages 268-273, by Vivarelli (the "Vivarelli article"), which is cited in the Final Office Action for the above-identified application dated July 6, 2007.
- 5. Despite the use of the word "Bayesian" in its title, I understand the Vivarelli article to describe an artificial neural network.
- 6. An artificial neural network, such as the one described by the Vivarelli article, is trained to perform computations on a particular set of input information and cannot perform its computations when any part of the data from the particular set of input information is missing.
- 7. A conventional Bayesian network also is trained to perform computations on a particular set of input information, however, a conventional Bayesian network still is able to perform its computations when data from the particular set of input information is missing.

- 8. The artificial neural network described in the Vivarelli article is contrasted from a conventional Bayesian network in that a conventional Bayesian network can perform its computations when any part of the data from its particular set of input information is missing.
- 9. I further declare under penalty of perjury pursuant to the laws of the United States of America that the foregoing is true and correct and that this declaration was executed by me on October 9, 2007 at Rochester,

New York.

Jieho I no

Date

10/9/200t

Street

City, State, Zip